



1965 ANNUAL REPORT

W. R. GRACE & CO.



PAPER FOOD CHEMICALS OIL TRANSPORTATION

DIRECTORS AND OFFICERS

Board of Directors

Allen S. Rupley	Chairman of the Board
John T. Cahill	John T. Madden
Charles A. DuBois	W. J. McNeil
E. Ainsworth Eyre	Roger Milliken
J. Peter Grace	John H. Phipps
John C. Griswold	Michael G. Phipps
Francis G. Kingsley	Eben W. Pyne
Felix E. Larkin	O. V. Tracy

Directors Emeritus

Bradley Dewey	James J. Minot
Harry C. Hagerty	Harold J. Roig

Executive Officers

J. Peter Grace	President
Felix E. Larkin	Executive Vice President
Alexander T. Daignault	Executive Vice President
John C. Duncan	Executive Vice President
Andrew B. Shea	Executive Vice President
O. V. Tracy	Executive Vice President
Charles H. Erhart, Jr.	Vice President
Thomas E. Hanigan, Jr.	Vice President
William J. Haude	Vice President
Leo A. Larkin	Vice President, General Counsel and Secretary
George F. Mason, Jr.	Vice President
John D. J. Moore	Vice President
D. W. Robbins, Jr.	Vice President
K. A. Lawder	Treasurer
F. R. Feuss	Controller

W. R. GRACE & CO.

1965 ANNUAL REPORT



Chemicals

JUNE
22,
1966

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EXECUTIVE OFFICES

7 Hanover Square, New York, New York 10005

TRANSFER AGENTS

Marine Midland Grace Trust Company of New York
120 Broadway, New York, New York 10015

Continental Illinois National Bank and Trust Company of Chicago
231 South LaSalle Street, Chicago, Illinois 60690

REGISTRARS

Chemical Bank New York Trust Company
20 Pine Street, New York, New York 10015

The First National Bank of Chicago
38 South Dearborn Street, Chicago, Illinois 60690

ANNUAL MEETING

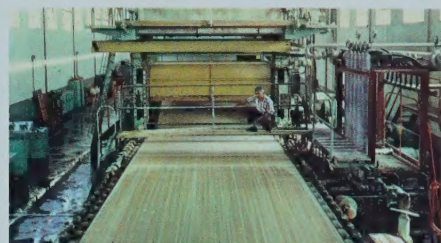
The annual meeting of the stockholders of W. R. Grace & Co. will be held at 11:00 A.M. Eastern Daylight Saving Time on Tuesday, May 10, 1966 at The New York Hilton, Avenue of the Americas, 53rd to 54th Street, New York, New York 10019.



Food



Oil



Paper



Transportation



FINANCIAL HIGHLIGHTS

	for the years ended December 31,	1965	1964*
		(dollars in thousands except amounts per share)	
Sales and Operating Revenues		\$1,003,070	\$876,201
Net Income After Taxes		\$ 45,348	\$ 42,740
Per Share of Common Stock (based on average number of shares outstanding)		\$ 2.80	\$ 2.72
Cash Dividends Paid:			
Preferred Stock		\$ 912	\$ 914
Common Stock		\$ 18,991	\$ 16,647
Per Share		\$ 1.17½	\$ 1.07½
Stock Dividend Paid on Common		—	2%
Net Working Capital		\$ 238,581	\$188,841
Net Fixed Assets		\$ 539,242	\$428,066
Stockholders' Equity per Common Share		\$ 27.52	\$ 25.27
Common Shares Outstanding at Year End (in thousands)		15,929	15,478
Number of Common Stockholders		41,409	41,790
Number of Employees		53,400	53,900

* 1964 adjusted to reflect companies acquired in 1965 and 1966 as poolings of interests.



J. PETER GRACE, President

To the Stockholders:

Sales and revenues of the Company and its subsidiaries for 1965 exceeded \$1 billion for the first time. The total, \$1,003,070,000, represents an increase of \$126,869,000, or 14%, over 1964. A major part of this increase was contributed by chemicals, sales of which amounted to \$661,808,000, or 66% of the total.

Consolidated net income after taxes in 1965 amounted to \$45,348,000 versus \$42,740,000 in 1964, an increase of 6%. Earnings per share of common stock were \$2.80, compared with \$2.72 the previous year. This was the fifth consecutive year in which earnings increased. The average annual increase in per-share earnings for this five-year period was 14%.

Chemical earnings on a pre-tax basis and before any allocation of corporate overhead and interest expense amounted to \$68,325,000, or 75% of the Company total. These earnings were 18% higher than those of 1964.

This growth in earnings was, unfortunately, largely offset by lower earnings of Grace Line Inc. The steamship industry experienced two major strikes in 1965, one of five weeks by longshoremen early in the year, and one of eleven weeks by seagoing officer personnel during the summer. The latter was the most costly in the history of the United States shipping industry. Although Grace Line showed a small operating profit, we estimate that the strikes reduced its earnings by more than \$4,500,000. The effect on the Company's reported earnings was approximately 30 cents per share.

In total, earnings of our various businesses in Latin America were slightly ahead of 1964. Earnings from chemicals, paper and mining increased substantially, but profits were unfavorably affected by the sharp drop in sugar prices from 1964 levels.

Because of higher Libyan taxes, profits of the Company's oil operations were below those for 1964. However, in determining consolidated taxes, it was possible to offset a major part of the effect of the higher taxes.

The Consumer Products Group, which manages the Company's food interests in the United States and Europe, operated at a profit in 1965 and contributed to overall Company earnings.

GROWTH

Growth depends above all upon capable management. Later in this report, the various operating units of the Company are described, and the officers responsible for their operations are listed.

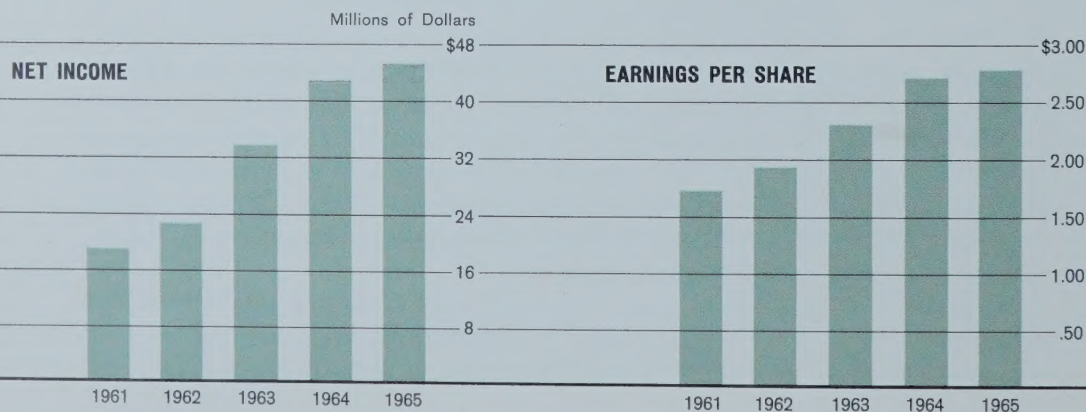
To provide these managers with the facilities needed to support growth in the rapidly expanding industries in which the Company operates, heavy capital expenditures are required. These amounted to \$152,558,000 in 1965 and were the highest in the history of W. R. Grace & Co. Equally significant is the \$445,000,000 of total expenditures during the past five years.

Among major programs completed or nearing completion at year end were expansions of phosphate fertilizer facilities in Bartow, Florida; of the Trinidad ammonia plant; of CRYOVAC film installations in many parts of the world; and of the Research Division's laboratory in Clarksville, Maryland. In total, 89 facilities of the Company and its subsidiaries underwent major expansion during the year. Many new facilities also were provided, including a container sealing compound plant in Atlanta, Georgia; additional SLURRY MIX plants and Grace Greentowns in the Corn Belt; and various chemical facilities in Latin America.

The magnitude of the growth program which the Company is able to support is in large part the result of the increase which has taken place in internally generated funds. Cash flow (net profit, depreciation and provision for deferred taxes) amounted to \$89,759,000 in 1965. In 1960, five years before, the comparable figure was \$42,157,000. On a per-share basis, the growth has been from \$4.00 in 1960 to \$5.59 in 1965.

Internally generated funds are not in themselves sufficient to support the Company's growth. Agreement has been reached for the Company to borrow \$100 million from insurance companies and other institutional investors from which the Company has borrowed in the past. This loan, which has a final term of 25 years and carries an interest rate of $5\frac{1}{8}\%$, will be taken down, one-half in 1966 and one-half in 1967.

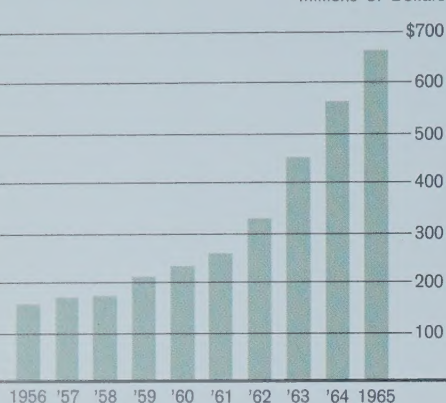
Consistent with the Government's program to improve the United States balance of payments, a wholly owned subsidiary, W. R. Grace Overseas Development Corporation, sold \$20 million of debentures in





CHEMICAL SALES

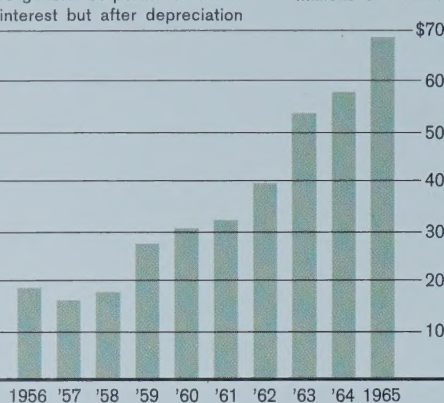
Millions of Dollars



CHEMICAL PRE-TAX OPERATING EARNINGS

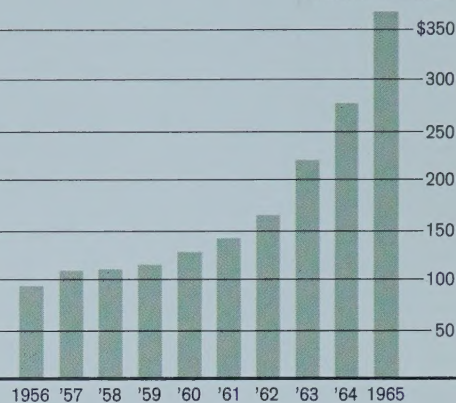
Before general corporate overhead and interest but after depreciation

Millions of Dollars



NET FIXED ASSETS IN CHEMICALS

Millions of Dollars



Europe in December, 1965. These debentures were not offered to residents or citizens of the United States. They carry a $5\frac{3}{4}\%$ interest rate, were sold at $97\frac{1}{2}$, and have a final term of 15 years. An additional issue of \$15 million in Europe of convertible debentures is currently contemplated. The funds so provided, together with retained earnings of subsidiaries in developed countries and the amount which can be transferred from the United States under the Government's guidelines, will be available for expansion in chemicals and food in Europe and in the other developed areas of the world.

The normal operations of W. R. Grace & Co. and Grace Line Inc., and other subsidiaries and affiliates, have an overall favorable impact of more than \$100 million annually upon the United States balance of payments.

INDUSTRIAL AND SPECIALTY CHEMICALS

The Dewey and Almy, Davison and Overseas divisions increased their sales and profits from industrial and specialty chemicals in 1965. The Specialty Products Group also showed improved results.

Davison introduced a new catalyst for petroleum cracking based on molecular sieves. This catalyst allows petroleum refiners to improve gasoline yields and lower refining costs. The boom in color television has greatly benefited Davison's rare earths operations, which have been expanded.

Nuclear Fuel Services, Inc. (NFS), 80% owned, has completed construction of its plant at West Valley, New York. Reprocessing of spent nuclear fuels for major public utilities and the Atomic Energy Commission will begin as soon as required testing is completed. Utility companies have announced plans for more new atomic power plants. NFS continues to manufacture and sell uranium- and thorium-based products for both civilian and military uses.

Hampshire Chemical Division, a leading manufacturer of chelating and sequestering agents, increased its earnings in 1965. The future outlook is good, with potential consumers carrying out research involving new uses for these products.

Teroson-Werke G.m.b.H., a subsidiary, is a major supplier of sealants, and of sound deadening and insulating materials to the automotive industry in Germany. Sales and earnings have shown consistent growth. This is also true of a subsidiary which manufactures and sells a variety of industrial and consumer sealing tapes and adhesives in Italy.

Flexible packaging materials plant, Simpsonville, South Carolina



In February, 1966 the Company offered to purchase from stockholders up to 700,000 shares of The Ruberoid Co., a manufacturer of construction materials.

Industrial and specialty chemicals accounted for 36% of total chemical sales in 1965.

AGRICULTURAL CHEMICALS

The Nitrogen Products and Davison divisions benefited from the accelerating growth in the use of agricultural chemicals and reported record sales and earnings in 1965. In addition to increases in ammonia and phosphate chemical capacity, several other developments were noteworthy.

The plant for the production of modern phosphate chemicals located in Bayonne, France successfully started operations. All of its output was sold.

A majority interest in Cresco Fertilizers Limited, one of the largest fertilizer companies in Australia, was acquired in January, 1966.

Staff members and one of the principal buildings at the Washington Research Center



Construction was started on a new \$4 million facility to produce ultra-high-analysis granulated fertilizers at Henry, Illinois.

Mechanical difficulties in the Trinidad ammonia plant during 1965 caused curtailment of production on several occasions. The plant is now operating at approximately its rated capacity.

Agricultural chemicals represented 34% of chemical sales.

PACKAGING AND PLASTICS

Sales of flexible packaging materials and of equipment for their application by the Cryovac Division, the Overseas Chemical Division and the Latin American Group increased substantially in 1965. Growth in sales of container sealing materials also continues.

W. R. Grace & Co. and subsidiaries now produce calendered vinyl film and sheeting in the United States, Germany, Mexico, Colombia, Brazil and Venezuela. During the year, capacity for these products was expanded.

The Hatco Chemical Division is now marketing polyester resins to customers in the automotive, marine and construction industries.

Chemicals for packaging together with other plastics accounted for 30% of total chemical sales in 1965.

FOOD

The Chocolate and Confectionery Division of the Consumer Products Group increased its sales of both intermediates and consumer products with a consequent improvement in earnings. Results of Van Houten were greatly improved as compared with those of 1964. New facilities and new marketing techniques were significant factors contributing to the improvement.

In order to expand the scope of the Company's position in the food industry in the United States, discussions have been held looking to the purchase of the business and assets of Fanny Farmer Candy Shops, Inc. and Nalley's, Inc. Both transactions are subject to final agreements on contracts and to approval by the stockholders of those companies.

PAPER

Paper operations in Peru, Colombia and Ecuador continue to benefit from the rapid increase in both packaging and cultural uses of paper and paper products. In Peru, sales and earnings showed particularly good improvement. In Colombia, although the tonnage output of the 50%-owned plant increased, the unsettled economic conditions caused earnings to be lower. The Ecuadorian plant increased its sales of boxes for the shipment of bananas. Both the Peruvian and the Colombian plants are being expanded.

OIL

The operations of Grace Petroleum Corporation continued to be satisfactory, and oil production increased. In January, 1966 the Libyan Government increased taxes retroactively to January 1, 1965 and also changed the tax treatment of royalties. The net income of Grace Petroleum Corporation was reduced, although, as previously described, the higher taxes were largely offset in determining consolidated taxes.

Four stages in the reprocessing cycle at the Nuclear Fuel Services, Inc. (NFS) plant, West Valley, New York

NFS personnel inspect spent-fuel-assembly shipping cask prior to accepting it for reprocessing.



Fuel elements are removed from the cask under water, then transferred to adjoining storage pool.



Highly radioactive materials are analyzed in one of the remotely controlled "hot" cells.



Elements are passed into the heavily shielded mechanical cell where the fuel rods are processed.

During 1966, exploratory drilling in the areas in which we have an interest will be increased. Earnings from Libya, while still satisfactory, are not expected to improve in 1966 because of the increased drilling costs and the effect of the new and higher Libyan taxes.

DISPOSITION OF ASSETS

Sound and continuing corporate growth requires not only the development of new opportunities but also the moving away from businesses which, in the judgment of management and the Directors, do not have a logical place in the Company's future plans.

In August, 1965 the business and substantially all the assets of the Grace National Bank of New York were sold to Marine Midland Grace Trust Company of New York. A profit of approximately \$10,400,000 realized from the sale was credited to retained earnings. W. R. Grace & Co. now holds preferred stock in the Marine Midland Corporation. The dividend income from this investment approximately equals the Company's former equity in the earnings of the Grace National Bank.

In January, 1966 the assets and business of the Polymer Chemicals Division were sold. As reported in the past, the Polymer Chemicals Division, despite rapid growth in sales, had shown an unsatisfactory return on invested capital.

In 1965 the contract to sell the Company's 50% interest in Pan American-Grace Airways, Inc. to Pan American World Airways, Inc., on which the Civil Aeronautics Board had taken no action, was terminated. In December, 1965 it was agreed to sell the interest in Panagra to Braniff Airways, Incorporated for \$15,000,000. This transaction is subject to approval by the C.A.B.

FINANCIAL

The Company's equity in the earnings of unconsolidated 50%-owned companies in excess of dividends received from those companies amounted to \$935,000 in 1965, or the equivalent of six cents per W. R. Grace & Co. common share. This is a reduction from the corresponding 1964 figure of \$2,472,000. The effect on earnings of the maritime strike against Gulf & South American Steamship Co., Inc., and the reduction in earnings of Productora de Papeles S.A. resulting largely from the devaluation of Colombian currency, were the principal causes of this reduction.

In June, 1965 the dividend on the Company's common stock was raised by the Directors to an annual rate of \$1.20, an increase of 10 cents. This was the fourth consecutive year in which an increase was authorized.

In May of 1965, certificates representing the Company's common stock began trading on the Amsterdam Stock Exchange in Holland. In August, 1965 the common stock was listed on the Midwest Stock Exchange.

MANAGEMENT

I am particularly glad to report that in February, 1966 the Directors elected Allen S. Rupley Chairman of the Board. Although only 63 years of age, Mr. Rupley has served the Company for 48 years in important positions in Latin America and in the United States.

Leo A. Larkin, formerly Corporation Counsel of the City of New York, was elected Vice President, General Counsel and Secretary of the Company in January, 1966.



Phosphate rock being excavated from the mine in Togo, West Africa

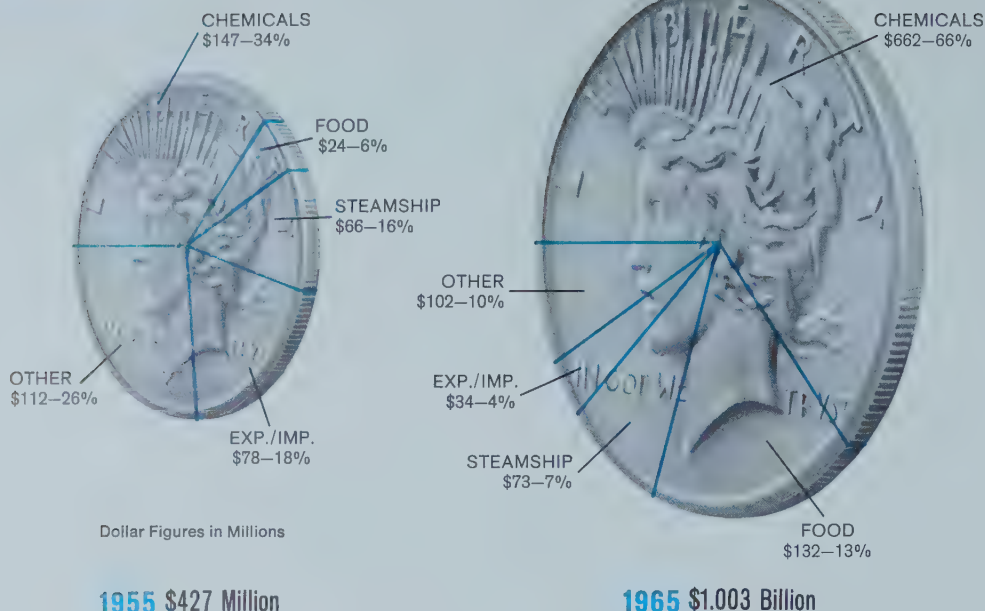
The expanded phosphate facilities at Bartow, Florida



The newly completed phosphate plant in Bayonne, France



REVENUES



William J. Haude and George F. Mason, Jr. were elected Vice Presidents of the Company in January. Mr. Haude is President of the Nitrogen Products Division, and Mr. Mason is Associate General Counsel.

Robert D. Goodall was named President of the Davison Chemical Division in July, 1965. Mr. Goodall was formerly Executive Vice President and has been with Davison for 27 years.

The Specialty Products Group was formed in January, 1966. It includes four divisions with related manufacturing and marketing characteristics — DuBois Chemicals, Dearborn Chemical, Vestal Laboratories and Veratex. Edward L. Hutton has been named Group Executive.

SUMMARY

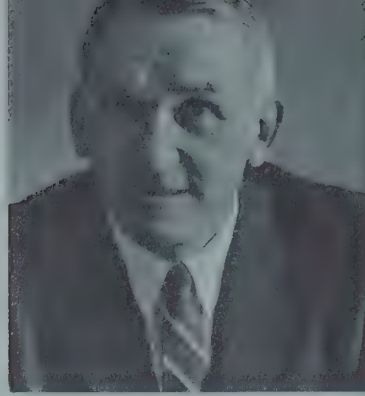
It is gratifying that the profit momentum developed in chemical activities has reached the point where the Company is able to absorb the impact of a major earnings setback such as the Grace Line strikes and yet report increased earnings. We have been striving to achieve this position since the start of diversification into the chemical industry. We believe that results in 1965 attest to the success of this program.

With continuing growth in all of our major businesses, with a favorable economic outlook, and with major new facilities coming into operation, we are optimistic that the Company will continue in 1966 the growth pattern of the last five years.

Respectfully submitted,

J. Peter Grace
President

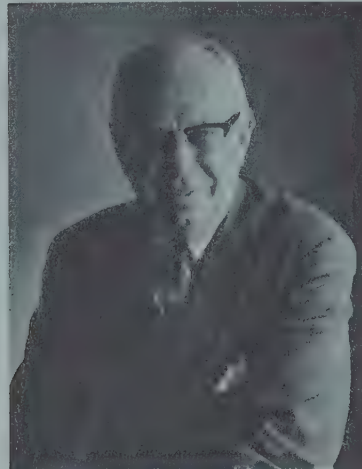
March 10, 1966



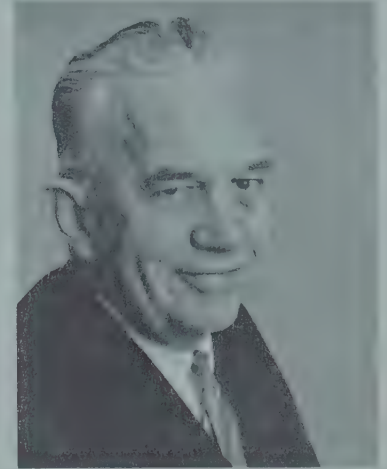
ALEXANDER T. DAIGNAULT
Executive Vice President



CHARLES H. ERHART, JR.
Vice President



K. A. LAWDER
Treasurer



F. R. FEUSS
Controller

1965 **GRACE**
FINANCIAL
FOLIO
W. R. GRACE & CO.

Consolidated Statement of Income

	1965	1964*
	(in thousands)	
REVENUES		
Sales and operating revenues	\$1,003,070	\$ 876,201
Dividends and interest – Note 1	7,322	6,784
Net gain on disposition of properties and investments	3,629	2,391
	<u>1,014,021</u>	<u>885,376</u>
COSTS AND EXPENSES		
Cost of goods sold and operating expenses – Note 2	694,289	599,523
Selling, general and administrative expenses	169,580	144,425
Depreciation and depletion	41,906	37,542
Research and development expenses	15,943	14,401
Interest expense	24,511	19,310
U.S. and foreign taxes on income – Note 3	21,493	24,066
Unrealized foreign exchange losses	951	3,369
	<u>968,673</u>	<u>842,636</u>
Net Income	<u>\$ 45,348</u>	<u>\$ 42,740</u>

Consolidated Statement of Retained Earnings

	1965	1964*
	(in thousands)	
Balance at beginning of year – Note 1	\$ 231,962	\$ 215,228
Net income	<u>45,348</u>	<u>42,740</u>
	277,310	257,968
Gain on disposition of investments (1965 – Grace National Bank; 1964 – Texas Gulf Producing Company) – Note 1	10,357	3,160
Dividends paid:		
W. R. Grace & Co.		
Cash		
Preferred	912	914
Common (\$1.17½ per share in 1965; \$1.07½ in 1964)	18,201	14,557
Common stock (2%)	—	11,559
Pooled companies – prior to combination with the Company	790	2,136
Balance at end of year	<u>\$ 267,764</u>	<u>\$ 231,962</u>

Retained earnings include: (a) \$64,800,000 (1964-\$59,943,000) of the retained earnings of Grace Line Inc., a wholly-owned subsidiary, deemed not available for dividends since it is related to special funds under joint control with the U.S. Maritime Administration or invested therefrom in subsidized vessels; (b) \$13,269,000 (1964-\$10,133,000) set aside by foreign subsidiaries, principally as required by statute; (c) approximately \$35,700,000 (1964-\$12,200,000)

which has been transferred to capital stock accounts on the books of subsidiary companies. Parent company unappropriated retained earnings at December 31, 1965 amounted to \$112,233,000 (1964-\$79,386,000). Of these retained earnings \$31,000,000 were free of the restriction on payment of cash dividends imposed by the terms of the loan agreements with institutional investors referred to in Note 5 which is the most restrictive of the Company's loan agreements.

* Certain figures have been restated

Consolidated Statement of Capital Surplus

	1965	1964*
	(in thousands)	
Balance at beginning of year – Note 1	\$ 143,701	\$ 122,469
Excess of par or stated value of capital stock of companies acquired in poolings of interests transactions over the par value of the Company's shares issued in exchange – Note 1	—	3,653
	143,701	126,122
Excess over par value of common stock issued upon:		
Payment of stock dividend	—	11,347
Exercise of stock options	1,972	2,293
Conversion of 3½% subordinate debentures	3,960	3,954
Acquisition of various companies	8,441	344
Expenditures relating to acquisition of companies in poolings of interests transactions – Note 1	(3,996)	(1,752)
Other	620	1,393
Balance at end of year	<u>\$ 154,698</u>	<u>\$ 143,701</u>

Consolidated Statement of Source and Application of Funds

	1965	1964
	(in thousands)	
SOURCE		
Net income	\$ 45,348	\$ 42,740
Provision for depreciation and depletion	41,906	37,542
Provision for deferred income taxes	2,505	3,156
Increase in long-term debt	125,154	33,780
Proceeds from –		
Liquidation of Texas Gulf Producing Company	—	10,652
Exercise of stock options, etc.	2,667	4,153
Other transactions	20,158	21,604
	<u>\$ 237,738</u>	<u>\$ 153,627</u>
APPLICATION		
Cash dividends	\$ 19,903	\$ 17,560
Capital expenditures and increase in investments	168,095	112,768
Increase in working capital	49,740	23,299
	<u>\$ 237,738</u>	<u>\$ 153,627</u>

Consolidated Balance Sheet

GRACE

ASSETS

	December 31,	
	1965	1964*
	(in thousands)	
CURRENT ASSETS		
Cash	\$ 84,003	\$ 53,942
U.S. Government and other marketable securities, at cost (approximate market value)	20,407	8,648
Notes and accounts receivable, less reserves of \$6,779,000 (1964 – \$5,458,000)	187,674	174,381
Inventories – See page 18	193,510	158,386
Prepaid expenses	7,448	8,008
TOTAL CURRENT ASSETS	<u>493,042</u>	<u>403,365</u>
SPECIAL FUNDS AND DEPOSITS – Note 2.		
	<u>38,619</u>	<u>48,524</u>
OTHER ASSETS		
Investment in Marine Midland Corporation – Note 1	30,515	—
Investment in Grace National Bank – Note 1	—	19,054
Investments in and advances to unconsolidated sub- sidiaries and 50% owned companies, at cost – Note 1	11,078	9,329
Miscellaneous investments, at cost or less, and other assets	39,281	36,210
Goodwill, less amortization of \$2,460,000 (1964–\$1,967,000) TOTAL OTHER ASSETS	<u>18,815</u>	<u>8,156</u>
	<u>99,689</u>	<u>72,749</u>
PROPERTIES AND EQUIPMENT, at cost less accumulated depreciation and depletion of \$323,314,000 (1964 – \$282,- 337,000) – See page 18		
	<u>539,242</u>	<u>428,066</u>
	<u>\$1,170,592</u>	<u>\$952,704</u>

* Certain figures have been restated

W. R. GRACE & CO. and Subsidiary Companies

LIABILITIES

	December 31,	
	1965	1964*
	(in thousands)	
CURRENT LIABILITIES		
Loans payable — See page 19	\$ 91,630	\$ 73,115
Accounts and acceptances payable	121,021	105,612
U.S. and foreign taxes on income — Note 3	19,308	19,125
Other current liabilities	22,502	16,672
TOTAL CURRENT LIABILITIES	254,461	214,524
DEFERRED TAXES ON INCOME — Note 3	24,368	22,506
FOREIGN SOCIAL LAW OBLIGATIONS AND OTHER NON-CURRENT LIABILITIES	27,997	26,322
DEFERRED INCOME	5,931	4,686
LONG-TERM DEBT — See page 19	387,132	261,978
EQUITY OF MINORITY STOCKHOLDERS IN CONSOLIDATED SUBSIDIARIES	19,976	19,201
	719,865	549,217

STOCKHOLDERS' EQUITY

CAPITAL STOCK — Note 4		
Preferred stock outstanding	12,336	12,346
Common stock issued and outstanding—\$1.00 par	15,929	15,478
CAPITAL SURPLUS, per accompanying statement.	154,698	143,701
RETAINED EARNINGS, per accompanying statement	267,764	231,962
	450,727	403,487
	\$1,170,592	\$952,704

Notes to Financial Statements

GRACE

NOTE 1—PRINCIPLES OF CONSOLIDATION:

The consolidated financial statements include the accounts of W. R. Grace & Co. and all majority owned and controlled domestic and foreign subsidiary companies. The assets and liabilities of the Company's foreign subsidiaries have been translated into United States dollars at year-end rates of exchange, except that fixed assets (and related depreciation) and certain imported inventories have been translated at rates prevailing at dates of acquisition. Income and expenses (other than depreciation) have been translated at rates prevailing during the year.

The Company's equity in the aggregate net earnings of its principal 50%-owned companies (Gulf & South American Steamship Co., Inc., Pan American-Grace Airways, Inc. and Productora de Papeles S.A.) for 1965 exceeded dividends received from those companies by \$935,000. The Company's equity (\$23,577,000) in the net assets as shown by the financial statements of those companies at December 31, 1965 exceeded the cost of its investments in the companies by \$17,353,000.

In 1965 and January 1966 the Company acquired the assets and businesses of several companies in exchange for shares of its common stock. For accounting purposes certain of these transactions have been treated as poolings of interests. Accordingly, the Consolidated Statement of Income includes the results of operations for the entire year and the comparative financial statements for 1964 have been restated to include the accounts of these companies. In four acquisitions, principally for stock, cash payments were also made. The total cash payments of \$3,265,000 have been charged to capital surplus.

The 1964 Consolidated Balance Sheet has also been restated to include the accounts of N. V. Cacaofabriek de Zaan and its subsidiaries which were acquired in 1964 but stated in the Consolidated Balance Sheet as an investment since the acquisition was made late in the year.

On August 18, 1965 the Company's 80%-owned subsidiary, Grace National Bank, sold its business and substantially all of its assets to Marine Midland Grace Trust Company of New York (a subsidiary of Marine Midland

INVENTORIES

	December 31, 1965	December 31, 1964*
	(in thousands)	
Raw and packaging materials	\$ 51,291	\$ 43,289
In process	13,930	12,533
Finished products	82,510	63,205
General merchandise, commodities, etc.	27,649	22,780
Stores and supplies	18,130	16,579
	<u>\$193,510</u>	<u>\$158,386</u>

Inventories are stated at the lower of cost or market. Market for raw and packaging materials and stores and supplies is based on replacement cost and for other inventory classifications on net realizable value. Due to the diversified nature of the companies' operations, several bases of determining costs are used, including first in-first out, last in-first out, average and specific cost.

* Certain figures have been restated for comparative purposes — See Note 1.

PROPERTIES AND EQUIPMENT

	Gross Book Value	Depreciation & Depletion
	(in thousands)	
Land	\$ 55,808	\$ 3,011
Producing and undeveloped oil properties . . .	5,378	584
Buildings	145,574	58,168
Machinery, equipment, etc.	456,008	216,903
Vessels and marine property	114,179	44,648
Projects under construction	85,609	—
	<u>\$862,556</u>	<u>\$323,314</u>

W. R. GRACE & CO. and Subsidiary Companies

Corporation) in exchange for 360,000 shares of a \$5.50 Convertible Preferred Stock of Marine Midland Corporation. The Bank is in liquidation and the Company has received 277,406 shares of such stock pursuant to the plan of liquidation. The Company's equity in the gain on this transaction of \$10,357,000 has been credited to retained earnings. The Company's equity in the earnings of the Bank from January 1 to August 17, 1965 of \$996,000 and the dividends of \$564,000 from Marine Midland Corporation for the remainder of the year have been included in dividends and interest income in the Consolidated Statement of Income. In 1964 the Company's equity in the earnings of Grace National Bank was \$1,608,000.

In January 1966 the Company sold substantially all of the net assets of its Polymer Chemicals Division. The final price will not be determined until after an audit has been completed; however, the estimated effect of this transaction has been reflected in the Consolidated Statement of Income.

NOTE 2 - SPECIAL FUNDS AND DEPOSITS:

The following amounts were included under this caption:

Special funds of Grace Line Inc. (including U.S. Government and other marketable securities at cost of \$18,359,000).....	\$32,920,000
Other special and guaranty deposits.....	5,699,000
	<u>\$38,619,000</u>

Grace Line Inc. operates under an operating-differential subsidy agreement with the United States Maritime Subsidy Board covering all of the company's regular routes and expiring on December 31, 1977.

The Grace Line Inc. special funds are composed of funds required under this agreement and escrow funds required in connection with financing agreements for the construction of specific ships. The agreement requires deposits in the special funds of (a) the company's 50% share of profits in excess of 10% of capital necessarily

LONG-TERM DEBT*

	Interest Rates	Years of Maturity	Due Within One Year ⁽¹⁾	Due After One Year
(in thousands)				
W. R. GRACE & CO.				
Promissory notes	5	1966-90	\$ 4,111	\$ 98,667
Promissory notes	5 1/2	1966-90	1,111	26,667
Subordinate debentures ⁽²⁾	4 1/4	1990	—	83,469
Subordinate debentures ⁽³⁾	3 1/2	1975	8	2,519
Promissory note	4 1/2	1969	—	28,000
Promissory notes	4-5	1966-85	983	14,281
Junior subordinated note ⁽⁴⁾	4 1/2-5	1974	—	10,000
Sundry indebtedness			1,135	4,683
			<u>7,348</u>	<u>268,286</u>

SUBSIDIARY COMPANIES

Grace Line Inc.				
Merchant Marine Bonds ⁽⁵⁾	4.20-4.25	1966-78	**	13,770
Merchant Marine Bonds ⁽⁵⁾	4.20	1966-87	**	24,640
Nuclear Fuel Services, Inc.				
Promissory notes	5 1/2	1966-75	1,195	10,755
W. R. Grace Overseas Development Corporation				
Debentures ⁽⁶⁾	5 3/4	1980	—	20,000
Federation Chemicals Limited				
Bank loan	5	1966-68	1,000	1,000
Subordinated notes, Series A	5 1/4-5 3/4	1968-77	—	27,220
Subordinated notes, Series B	5 1/2-6 1/2	1967-69	—	3,780
Sundry indebtedness			11	517
Other Subsidiaries			2,683	17,164
			<u>\$12,237</u>	<u>\$387,132</u>

(1) Included in current liabilities under loans payable.

(2) Convertible into one share of common stock for each \$65 principal amount.

(3) Convertible into 4.05418 shares of common stock for each \$100 principal amount.

(4) This note was paid on January 17, 1966.

(5) Sinking fund bond - U.S. Government Insured.

(6) Guaranteed by W. R. Grace & Co.

* See Note 5 for recent financing.

** Amount due within one year is payable out of special funds and deposits (see Note 2).

Notes, continued

employed in subsidized operations (the remaining 50% being subject to recapture), (b) amounts equal to depreciation charges on subsidized vessels, to the extent earned, and (c) proceeds from insurance, indemnity or sale of subsidized vessels. The special funds may be used to purchase, construct or reconstruct vessels and containers (see Note 6) and to pay the principal of mortgage notes on vessels and under specified conditions may be transferred to the general funds of Grace Line Inc.

Under this agreement Grace Line Inc. is entitled to a subsidy representing the excess of certain of its costs over similar costs incurred by foreign-flag competitors. The subsidy is subject to recapture by the United States to the extent of 50% of the amount by which earnings from subsidized operations in each ten-year period exceed 10% of the capital necessarily employed in such operations. Any recapture is withheld by the United States from the subsidy receivable. Net subsidy of \$16,561,000 (1964-\$17,947,000) has been deducted from cost of goods sold and operating expenses in the Consolidated Statement of Income.

NOTE 3 - U.S. AND FOREIGN TAXES ON INCOME:

The United States Internal Revenue Service has not completed examinations of the consolidated income tax returns of the Company and its domestic subsidiaries for 1953 and subsequent years. Examinations of tax returns in foreign countries have in some cases not been completed for the most recent years. It is believed, however, that provisions made in 1965 and earlier years are adequate.

Additional foreign and United States taxes might become payable if undistributed earnings of foreign subsidiaries were to be paid out as dividends, but such taxes, if any, have not been fully reserved for since a substantial portion of such earnings has been or will be reinvested.

Profits deposited in the reserve funds by Grace Line Inc. (see Note 2) are not subject to federal income taxes in the year earned. In the event that any profits are withdrawn from the reserve funds and paid into general funds the amounts would have to be included in taxable income of the year of withdrawal. No provision has been made for such taxes since the amounts, if any, are not presently determinable.

Depreciation is generally computed on the straight-line method over the estimated useful lives of the assets, whereas for income tax purposes depreciation is generally computed on accelerated bases. The excess depreciation taken for tax purposes over depreciation as recorded on the books has resulted in a tax deferral which has been included in the income taxes charged against earnings and credited to deferred taxes on income. As a result of the 1964 reduction in the U.S. corporate tax rates a portion of the Company's deferred taxes on income is no longer required. This portion is being restored to income over a five-year period which began in 1964; in 1965 the amount restored to income was \$263,000.

The application of the investment credit permitted under the provisions of the 1962 Revenue Act has reduced the 1965 tax provision by \$2,709,000.

NOTE 4 - CAPITAL STOCK:

The preferred stock (of \$100 par) issued and outstanding is listed below:

	Shares Authorized and Issued	Shares in Treasury	Outstanding Shares	Par Value
6% Cumulative	40,000	2,724	37,276	\$ 3,727,600
8% Cumulative Class A	50,000	1,868	48,132	4,813,200
8% Noncumulative Class B	40,000	2,049	37,951	3,795,100
				<u>\$12,335,900</u>

Under the Company's Certificate of Incorporation as amended by the stockholders in May 1965, the authorized common stock of the Company is 30,000,000 shares. Changes in the common stock during the year are summarized below:

	Shares
Balance, December 31, 1964	14,742,290
Exchange of common stock in poolings of interests transactions - Note 1	735,770
	<u>15,478,060</u>
Common stock issued upon:	
Conversion of 3½ % subordinate debentures	176,989
Exercise of stock options	89,837
Exercise of stock options and warrants of pooled companies	33,860
Acquisition of a company	150,611
Balance, December 31, 1965	<u>15,929,357</u>

Of the unissued common stock, 1,662,306 shares have been reserved for conversion of the 3½ % and 4¼ % subordinate debentures and exercise of stock options. The agreements for two acquisitions made in 1965 provide for additional payments in stock in 1966 and 1968, the amounts to be determined in accordance with prescribed formulas.

At the beginning of 1965 options were outstanding for the purchase of 331,590 shares of common stock and 245,325 shares were available for granting of additional options. During 1965 options for 39,730 shares were granted at an average option price of \$54.96. The option prices were not less than 100% of market on the respective dates of grant.

During the year options for 91,755 shares were exercised at an average option price of \$23.35 and options for 5,895 shares terminated. At the end of the year options were outstanding for 273,670 shares at prices ranging from \$14.78 to \$60.31 per share or an average of \$45.19, options for 61,769 shares were exercisable and 198,112 shares were available for granting of additional options. In addition 93,588 shares were available to cover options which may be assumed or granted in lieu of existing options granted by companies which may be acquired.

NOTE 5 - RECENT FINANCING:

In February 1966 the Company entered into loan agreements with a group of institutional investors under which a total of \$100,000,000 in unsecured 5½ % promissory notes will be issued. Of this amount \$14,700,000 is scheduled to be taken down on March 15, 1966, \$35,300,000 on June 15, 1966 and \$50,000,000 on or before March 15, 1967. A commitment fee of ½ of 1% per annum is payable from October 1, 1965 until the dates the money is taken down. The notes will mature on March 1, 1991 and require annual prepayments of \$5,000,000 beginning March 1, 1972. They can be redeemed in whole or in part at any time by payment of principal, accrued interest and premium.

NOTE 6 - COMMITMENTS AND CONTINGENT LIABILITIES:

Under the operating-differential subsidy agreement referred to in Note 2, Grace Line Inc. has agreed to award contracts by 1966-1967 to complete the replacement of its fleet if certain conditions of economic feasibility are met. The ultimate cost of the program is not presently determinable. In connection with this program Grace Line Inc. has construction contracts, and also construction-differential subsidy agreements with the United States Maritime Subsidy Board for six new cargo ships which are scheduled to enter service in 1966-1967. The cost to Grace Line Inc. of these six vessels is estimated at \$41,500,000 of which approximately \$21,600,000 has been expended or accrued at December 31, 1965. The cost will be financed from Grace Line's special funds and by U.S. Government Insured Merchant Marine Bonds.

In connection with the issuance by Federation Chemicals Limited, a wholly-owned subsidiary, of its 5¼% - 5¾% Series A Subordinated Notes, due 1968 to 1977, and its 5½% - 6½% Series B Subordinated Notes, due 1967 to 1969, the Company has agreed (1) to purchase, at a set price, all of the ammonia produced by Federation in excess of its requirements and (2) in addition to the Company's outstanding guarantee of Federation's 5% bank loan, due 1966 to 1968, under certain conditions to advance cash to Federation to meet payments required under its Series A and Series B Subordinated Notes. The Company is a party to a twenty-year charter arrangement for two specially constructed tankers to transport ammonia and a twenty-year lease for an ammonia conversion plant in North Carolina. The annual rentals under the charter and the lease are approximately \$2,400,000.

There are several domestic and foreign pension plans presently in effect. The aggregate pension cost of the Company and its subsidiaries (excluding Latin American subsidiaries) in 1965 was \$4,562,000. The unfunded amount of past service benefits which are being provided for by payments to trustees over a period of years, at December 31, 1965 was estimated to be \$6,431,000. Pension payments are made to employees of the Latin American subsidiaries in accordance with the social laws of those countries in which operations are conducted. The cost of these plans has not been actuarially determined and, generally, such foreign subsidiaries charge the cost of pensions to income as payments are made.

On December 15, 1965 the Company entered into an agreement providing for the sale of the Company's 50% interest in Pan American-Grace Airways, Inc. (Panagra) to Braniff Airways, Incorporated for \$15,000,000. The transaction is subject to the approval of the Civil Aeronautics Board and certain other conditions.

In February 1966 the Company offered to purchase up to 700,000 shares of The Ruberoid Co. from the Ruberoid stockholders for \$50 a share. The Company may purchase all or any part of the shares tendered but is not obligated to purchase any shares unless 700,000 shares are tendered on or before March 11, 1966 in which case the Company must purchase at least 700,000 shares. The Company reserves the right to extend its offer for six days.

There are various lawsuits, claims, commitments and contingent liabilities but they are not expected to have any material adverse effect on the consolidated financial position or results of operations.

OPINION OF INDEPENDENT ACCOUNTANTS

PRICE WATERHOUSE & CO.

60 Broad Street, New York 10004

To the Stockholders and Board of Directors of W. R. Grace & Co.

In our opinion, the accompanying consolidated balance sheet, the related consolidated statements of income, capital surplus and retained earnings and the consolidated statement of source and application of funds present fairly the financial position of W. R. Grace & Co. and its consolidated subsidiary companies at December 31, 1965, the results of their operations and the supplementary information on funds for the year, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year. Our examination of these statements was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

March 3, 1966

Price Waterhouse & Co.

Ten Year Financial Summary



EARNINGS STATISTICS ⁽¹⁾ (In Thousands except Amounts per Share)

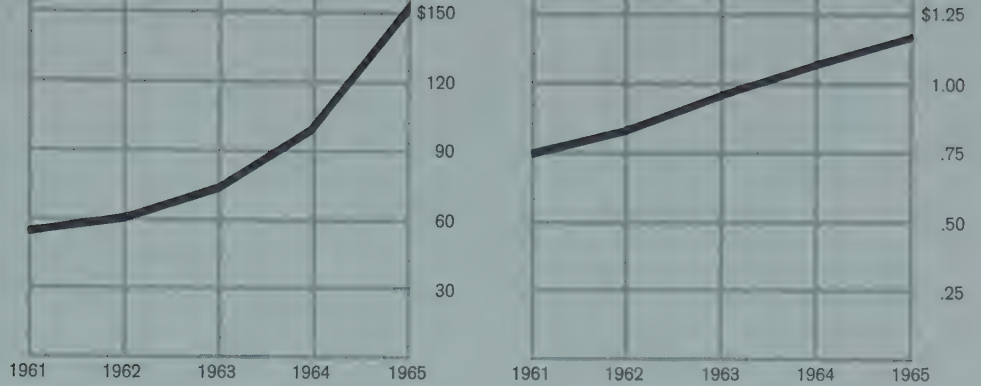
Year	Net Sales and Operating Revenues	Earnings Before Depreciation and U.S. and Foreign Taxes	Depreciation	U.S. and Foreign Income Taxes	Net Earnings
1956	\$ 438,137	\$ 47,518	\$14,287	\$12,775	\$20,456
1957	459,728	44,174	17,621	10,200	16,353
1958	434,234	40,178	20,718	8,465	10,995
1959	476,790	50,588	21,925	12,197	16,466
1960	552,871	54,281	28,201	9,860	16,220
1961	534,699	61,108	29,218	13,060	18,830
1962	591,532	72,901	31,500	18,784	22,617
1963 ⁽³⁾	699,587	84,533	30,404	20,640	33,489
1964	876,201	104,348	37,542	24,066	42,740
1965	1,003,070	108,747	41,906	21,493	45,348

BALANCE SHEET STATISTICS ⁽¹⁾ (All Dollars in Thousands except Amounts Per Share)

Dec. 31	Net Working Capital	Fixed Assets		Capital Expenditures	Long-Term Debt
		Gross	Net		
1956	\$108,138	\$281,056	\$163,889	\$ 41,408	\$ 91,161
1957	120,632	337,004	207,546	63,674	126,869
1958	130,295	362,602	221,932	41,241	163,503
1959	138,136	392,138	232,735	34,242	163,710
1960	133,052	475,107	275,332	51,520	194,501
1961	136,093	512,923	297,104	55,923	203,485
1962	146,908	598,933	340,928	61,552	233,944
1963 ⁽³⁾	157,368	589,392	347,789	74,073	226,228
1964	188,841	710,403	428,066	100,503	261,978
1965	238,581	862,556	539,242	152,558	387,132

(1) Includes data with respect to companies acquired in poolings of interests transactions but only for the year in which such transactions occurred and the preceding year. The aggregate amount of cash dividends on common stock includes the dividends paid

by those companies while the per share amount represents the rate paid by the Company only. Total Net Earnings, Earnings Per Share, Common Stock and Surplus, and Book Value Per Share include equity in Grace National Bank through August 17, 1965.



CAPITAL EXPENDITURES

DIVIDENDS PER SHARE

Net Earnings After Preferred Dividends		Average Number of Common Shares Outstanding	Dividends on Common Stock		Year
Total	Per Share ⁽²⁾		Total	Per Share ⁽²⁾	
\$19,519	\$2.03	9,629	\$ 9,828	\$1.02	1956
15,424	1.56	9,888	10,541	1.07	1957
10,066	1.01	9,920	9,693	.98	1958
15,538	1.51	10,271	7,343	.72	1959
15,292	1.48	10,304	7,580	.74	1960
17,901	1.73	10,365	7,779	.75	1961
21,689	1.93	11,251	9,261	.84	1962
32,560	2.29	14,189	13,794	.96	1963 ⁽³⁾
41,826	2.72	15,362	16,647	1.08	1964
44,436	2.80	15,895	18,991	1.18	1965

Minority Interest	Preferred Stock	Common Stock and Surplus	Book Value Per Share ⁽²⁾	Number of Common Stockholders	Dec. 31
\$12,247	\$12,608	\$216,935	\$21.89	21,178	1956
12,070	12,608	222,369	22.33	24,539	1957
6,888	12,608	223,616	22.30	28,052	1958
7,305	12,608	233,269	22.58	30,052	1959
28,947	12,608	240,253	23.21	31,306	1960
30,234	12,608	254,444	24.13	27,814	1961
36,841	12,608	288,236	24.88	30,919	1962
15,175	12,608	338,199	23.43	40,142	1963 ⁽³⁾
19,201	12,346	391,141	25.27	41,790	1964
19,976	12,336	438,391	27.52	41,409	1965

(2) Per share figures have been adjusted to reflect two-for-one stock split in 1962 and 2% stock dividends paid on common stock each year from 1959 through 1964.

(3) Cosden Petroleum Corporation, its assets having been sold January 1, 1963, is not included in that year.

NET SALES AND REVENUES (\$ - Millions)

	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
	\$ %	\$ %	\$ %	\$ %	\$ %	\$ %	\$ %	\$ %	\$ %	\$ %
Chemicals	159 37	171 37	175 40	216 45	237 43	259 48	331 56	450 64	564 64	662 66
Food	27 6	32 7	28 6	27 6	30 5	26 5	27 4	89 13	109 12	132 13
Steamship	70 16	84 18	78 18	74 15	69 12	66 13	71 12	75 11	84 10	73 7
Cosden	— —	— —	— —	— —	75 14	82 15	85 15	— —	— —	— —
Misc. Export/ Import	85 19	67 15	47 11	62 13	63 11	33 6	18 3	22 3	31 4	34 4
Other	97 22	106 23	106 25	98 21	79 15	69 13	59 10	64 9	88 10	102 10
Total	\$438	\$460	\$434	\$477	\$553	\$535	\$591	\$700	\$876	\$1,003

CAPITAL EXPENDITURES

This table compares capital expenditures, including those of pooled companies, for 1964 and 1965. Net fixed assets of other companies acquired are included in the year of acquisition.

	1964	1965
CHEMICALS	\$ 76,400,000	\$121,100,000
FOOD	10,600,000	5,100,000
OCEAN TRANSPORTATION . . .	6,400,000	17,500,000
OTHER	7,100,000	8,900,000
	<u>\$100,500,000</u>	<u>\$152,600,000</u>

NET FIXED ASSETS (\$ - Millions)

	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
	\$ %	\$ %	\$ %	\$ %	\$ %	\$ %	\$ %	\$ %	\$ %	\$ %
Chemicals	94 58	109 53	111 50	115 49	128 47	144 48	165 49	220 63	277 65	370 68
Food	11 6	11 5	13 6	13 6	13 4	14 5	20 6	25 7	41 9	43 8
Steamship	20 12	44 21	52 23	52 22	46 17	50 17	63 18	72 21	72 17	85 16
Cosden	— —	— —	— —	— —	65 24	64 21	62 18	— —	— —	— —
Other	39 24	44 21	46 21	53 23	23 8	25 9	31 9	31 9	38 9	41 8
Total	\$164	\$208	\$222	\$233	\$275	\$297	\$341	\$348	\$428	\$539

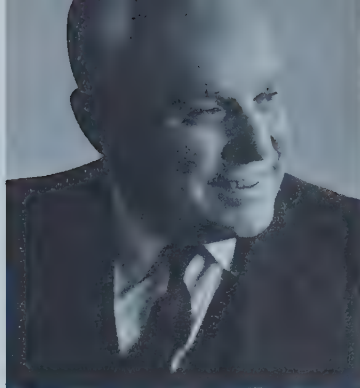
CORPORATE STAFF EXECUTIVES

Vice Presidents — Corporate Administration

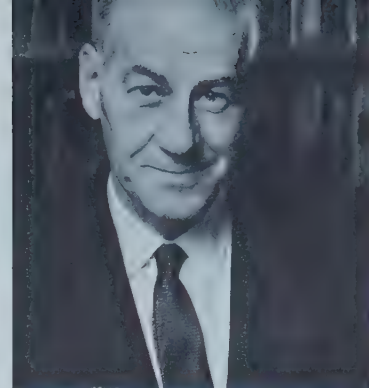
D. A. COAPE-ARNOLD • R. M. COQUILLETTE •
E. L. FARRELL, JR.

Vice Presidents — General Development

O. B. HANDER • J. B. HARRIS • L. KAMSKY •
H. J. PHILIPP



ALLEN S. RUPLEY
Chairman of the Board



FELIX E. LARKIN
Executive Vice President



D. W. ROBBINS, JR.
Vice President



JOHN D. J. MOORE
Vice President



OPERATING UNITS

CHEMICAL GROUP

Group Executive — O. V. TRACY

Senior Vice Presidents — BRADLEY DEWEY, JR. •
E. E. WINNE

Vice Presidents — G. de RICHEMONT •
R. H. LAFFERTY • T. J. TROUP •
C. E. WARING

O. V. TRACY
Executive Vice President



This Group comprises the chemical divisions described on the following six pages.

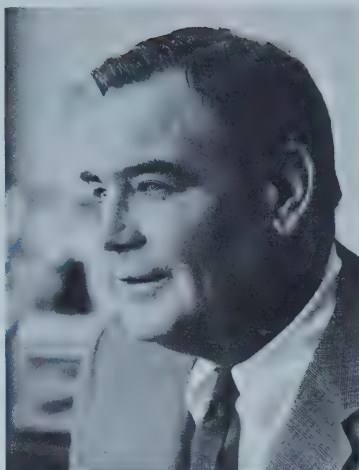
DAVISON CHEMICAL DIVISION

President — ROBERT D. GOODALL

Vice Presidents — P. EDMUNDS ·
W. R. FULLEM · J. S. MARKS ·
T. C. RUNION · F. J. SERGEYS ·
W. N. WATMOUGH, JR.

Headquarters — Baltimore, Maryland

Principal Plants — Bartow, Florida; Baltimore,
Maryland; Lake Charles, Louisiana; Cincin-
nati, Ohio; West Valley, New York; Valleyfield,
Quebec (subsidiary)



ROBERT D. GOODALL



Catalysts being shipped from the Cincinnati, Ohio plant

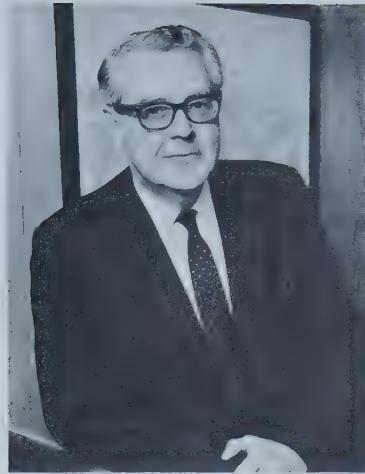
The growth of Davison is closely related to its broad technological and marketing position in inorganic chemicals. A leading supplier of cracking catalysts to the major oil companies, it also produces related industrial chemicals such as special-purpose catalysts, silica gel and fine-sized silicas. Phosphate-based agricultural chemicals make important contributions to sales and earnings. Davison also supervises the Company's 80% interest in Nuclear Fuel Services, Inc. (NFS).

In 1966, NFS will begin operation of the world's first privately owned facility for the reprocessing of spent nuclear fuels used in electric power generation. This subsidiary also manufactures nuclear feed materials and transports spent nuclear fuels.

Advances in technology have made possible new catalysts based on molecular sieves. In fluid cracking units, these catalysts have greater activity than conventional catalysts and the ability to increase gasoline yields.

A major expansion of facilities which convert phosphate rock into modern high-analysis fertilizers has been completed. Davison fertilizers and pesticides, and farm seeds produced by its Rudy-Patrick Seed Division, are sold to farmers through distributors and Company-owned retail outlets.

The Company holds a substantial interest in the rich Cotomib phosphate mines in the Republic of Togo, West Africa, as well as a majority interest in Société Atlantique d'Engrais Chimiques (SATEC), which manufactures and sells phosphate-based fertilizers in Southwestern France.



WILLIAM J. HAUDE

NITROGEN PRODUCTS DIVISION

President — WILLIAM J. HAUDE

Executive Vice Presidents — J. A. DOYLE • J. A. KELLEY

Vice Presidents — A. F. DUGAN • H. S. KING •
L. E. LUNDAHL • F. J. RONAN

Headquarters — New York, New York

Principal Plants — Memphis, Tennessee; Big Spring, Texas; Atlantic, Iowa; Wilmington, North Carolina, Trinidad, West Indies and Guánica, Puerto Rico (subsidiaries)

Two factors have contributed to an acceleration in the use of agricultural chemicals which shows every indication of continuing well into the future. One is the increased income which the farmer has found to be obtainable from more efficient use of land. The second is the growing recognition that world production of foodstuffs will have to be increased if even subsistence diets are to be provided for much of the population of the world.

More than 400 Grace Greentowns are located throughout the Corn Belt of the Midwest. These are retail outlets equipped to supply the farmer with all his agricultural chemical requirements. SLURRY MIX fertilizer, a balanced plant food in semi-liquid form, is a new product commercially marketed in many areas of the Midwest. The Division also manufactures and distributes feeds and feed supplements for livestock and poultry.

The Division's capacity to produce anhydrous ammonia will reach 900,000 tons annually when the second major expansion of the plant of a wholly owned subsidiary, Federation Chemicals Limited, in Trinidad, West Indies is completed in 1966. Ammonia from Trinidad is shipped as a liquid in specially designed tankers to the United States and Europe. Ammonia is sold for direct application to the soil and also is converted to nitrogen solutions, diammonium phosphate, ammonium nitrate and ammonium nitrate limestone.

A majority-owned subsidiary in Puerto Rico, Caribe Nitrogen Corporation, manufactures ammonia from which nitrogenous fertilizers are produced primarily for local markets.

More than 400 Grace Greentowns serve Corn Belt farmers.



CRYOVAC DIVISION

President — MANNING C. MORRILL

Vice Presidents — W. G. BAIRD, JR. · J. BIDWELL ·
J. F. HOLBROOK · R. A. MILLER · W. N. PAGE ·
D. H. TAYLOR

Headquarters — Duncan, South Carolina

Principal Plants — Simpsonville, South Carolina;
Cedar Rapids, Iowa; Woburn, Massachusetts;
Reading, Pennsylvania; Cooksville and
Brantford, Ontario (subsidiaries)



MANNING C. MORRILL

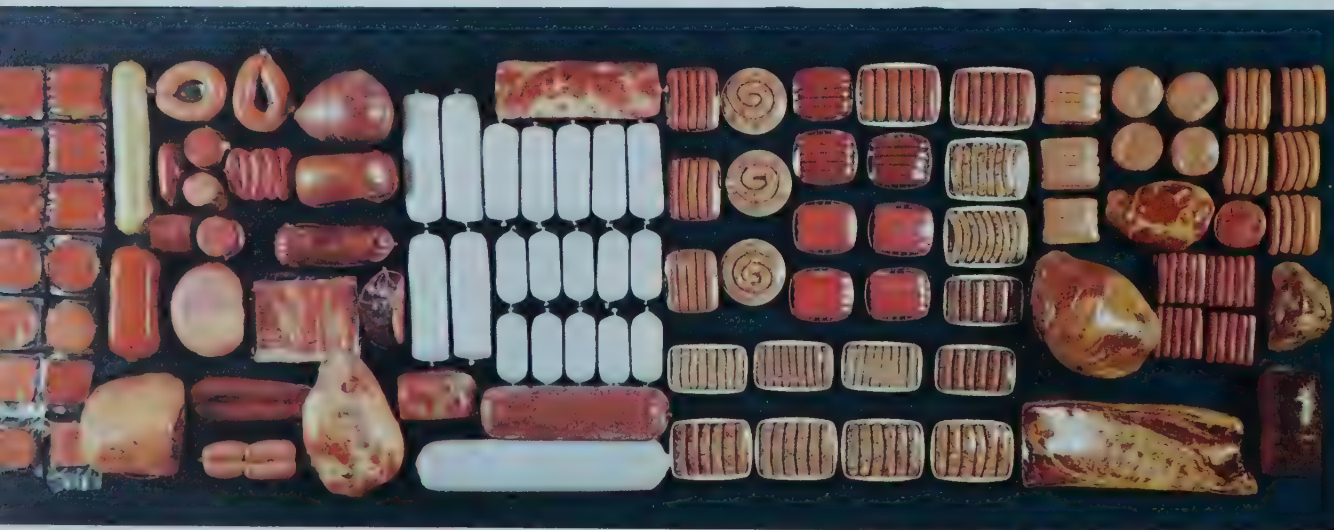
For more than 15 years the Cryovac Division has been a leader in flexible packaging, a position achieved because of its ability to offer customers a broad selection of special plastic films together with equipment for their efficient use. Products include shrinkable bags and films, pouches and high-barrier laminates to protect and improve the appearance of poultry, meat, cheese, produce, baked goods, toys, phonograph albums, textiles, and paper products.

Its capacity to serve the growing packaging field has been increased by the provision of facilities in the United States and Canada to produce rigid containers formed from biaxially oriented and high-impact polystyrene as well as foam polystyrene. Such containers complement the Division's position in present markets and create new markets, principally in the confectionery and bakery fields.

A new shrinking film in sheeted form has been introduced for in-store use by supermarkets to package food products. A new process involving film, equipment and techniques for efficient packaging of poultry at high speeds is also now available. The Division's plant in Simpsonville, South Carolina is being expanded for the fifth time, primarily to increase production of perforated film and laminates.

AIRMOLD products — reusable blow-molded plastic containers for cameras, hair dryers, power tools and similar items — have been added to the product line.

Flexible packaging materials



Vacuum packages

Casings

Shrink covers

Overwraps



GEORGE W. BLACKWOOD

DEWEY AND ALMY CHEMICAL DIVISION

President — GEORGE W. BLACKWOOD

Executive Vice President — WILLIAM L. TAGGART

Division Executives — C. E. BROOKES · J. E. DUFFY ·
D. T. ELLIS · J. D. KINGERY · J. G. MARK · E. L. MEARS ·
R. W. SAMUELS · J. J. SINGER · R. M. VINING

Headquarters — Cambridge, Massachusetts

Principal Plants — Cambridge and Acton, Massachusetts;
Owensboro, Kentucky; Libby, Montana; San Leandro,
California; Chicago, Illinois; Atlanta, Georgia; Nashua,
New Hampshire

Dewey and Almy manufactures chemical specialties, principally for sale to other manufacturers. Typically these materials are important to the performance or quality of the customers' products.

Many of the specialties are sold to the packaging industry. Flowed-in gasketing materials are used to seal metal or composite cans, and in glass jar closures and bottle crowns. DARAN polyvinylidene chloride-based emulsion, used for coating paper, paperboard and film, is finding increasing usage wherever barrier properties are required.

Materials for the construction and building maintenance industries are of growing importance. Bonding and air entraining agents, portland cement grinding aids, highway joint materials, caulks and sealants are among the many products sold. The Zonolite Division is a leading producer of insulating materials, including lightweight aggregates for plaster and concrete and polystyrene foam board.

Dewey and Almy also has a broad line of organic chemicals and resins sold mainly to manufacturers of rubber compounds, adhesives, paper and paint.

A number of Dewey and Almy products are the result of combined research in specialty papers and organic chemicals. Paper tape backings, coating bases for artificial leathers and automotive battery separators are in this category. A new battery separator has been introduced which gives better performance with the heavier-duty electrical systems common to late-model automobiles.

The Hampshire Chemical Division is the leading producer of chelating and sequestering agents. These materials seek out and control metallic ions in a wide variety of such products as textile dyestuffs, cosmetics, detergents and fertilizers.

Construction specialty products



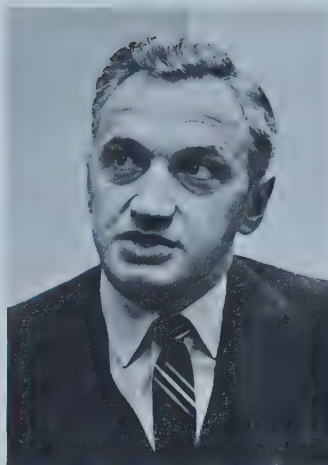
HATCO CHEMICAL DIVISION

President — ALEX KAUFMAN

Division Executives — O. J. ACKELSBERG ·
W. O. ERICKSON · L. FRANTZMAN · G. R. FREUND ·
W. W. METCALFE · E. MITTMAN · H. NEUSTEIN

Headquarters — Fords, New Jersey

Principal Plants — Fords, Edison and Linden, New
Jersey; Corinth, Mississippi; Brooklyn, New
York; Miami, Florida; Swanton, Ohio;
Cornwall, Ontario (subsidiary)



ALEX KAUFMAN

Typical end uses of vinyl sheet and film



This Division is a growing supplier of basic organic chemicals for industry. Principal products include plasticizers, which impart flexibility to finished vinyl products; phthalic anhydride; sebacic acid; and synthetic lubricants for the jet aircraft industry. The Division has an important position in vinyl film and sheet, printed and embossed vinyl sheeting, polyester resins and industrial solvents and waxes. End uses for Hatco products include floor coverings and polishes, wire and cable insulation, automobile and furniture upholstery and covers, window shades, and boat hulls.

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DAWBARN DIVISION

President — H. DUNLOP DAWBARN

Headquarters and Principal Plant —
Waynesboro, Virginia

The Dawbarn Division is a producer of plastic monofilaments, multifilaments and ribbon fibers. DAWBAC woven polypropylene fabric for use as primary backing for tufted carpets is obtaining wide acceptance as a replacement for jute.

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RESEARCH DIVISION

President — THOMAS G. GIBIAN

Vice Presidents — R. H. JONES ·
W. K. O'LOUGHLIN · M. G. SANCHEZ ·
P. L. VELTMAN · F. X. WERBER

Washington Research Center —
Clarksville, Maryland

Research has played an important role in stimulating the growth of W. R. Grace & Co.'s chemical business. In the operating divisions, research focuses primarily on extension and improvement of existing product lines and processes. At the Research Division laboratories, work is directed toward new technologies and new products.

Generally paralleling the important segments of the Company's chemical business, major fields of research include plastics and organic chemistry, nuclear, inorganic, and agricultural chemistry. Central research facilities are being expanded.



THOMAS G. GIBIAN



CARL N. GRAF

OVERSEAS CHEMICAL DIVISION

President — CARL N. GRAF

Vice Presidents — C. HELM • J. RIMMER • P. RINALDO •
F. WALCH • C. WHITE • P. WOODBERRY

Regional Executives —	
Australia	F. ELSWORTH
	H. LYONS
	H. PORTER
France	J. BAROIN
Germany	E. BANDOW
	P. BINNENKADE
	W. WEBER
	E. WEISS
Hong Kong	R. B. LLOYD
Italy	E. BIGNAMI
Japan	W. B. COLEMAN
New Zealand	A. PRETTY
Scandinavia	G. BUSCH
	H. SCHRODER
	T. WAHLSTROM
	H. WEISSER
South Africa	P. BOTHA
Spain	R. TALAVERA
United Kingdom	G. MacLEAN
	R. HALL
	J. HURST

Headquarters — New York, New York

This Division supervises the activities of more than 40 subsidiaries which operate 34 chemical plants in Europe, Africa and the Pacific area. Principal products are flexible packaging materials, sealing compounds, converted plastic products, and agricultural chemicals. Other products manufactured include adhesives, tapes, battery separators, desiccants, cleaning products, water treatment chemicals and chemicals for the automotive and construction industries. New products are constantly being added to broaden these product lines and serve more industries.

With sales and marketing efforts increasing rapidly, production facilities are continually being expanded in all operating areas. New sales offices have been opened in Athens, Lisbon, Manila and Hong Kong.

The Overseas Chemical Division has enlarged its operations in Australia by obtaining a majority interest in Cresco Fertilizers Limited. The Division also added new subsidiaries in Italy, Sweden, Spain and the United Kingdom. In Germany, a subsidiary, Teroson-Werke G.m.b.H., is an important supplier of sealants, adhesives and insulating materials used by the automotive industry.

International chemical operations, which began in 1922 in Europe, have stressed specialty products formulated to the particular requirements of customers. Technical service centers are operated at key locations.

Flexible packaging and chemical specialty plant, Epernon, France



SPECIALTY PRODUCTS GROUP

Group Executive — EDWARD L. HUTTON

Division Presidents —

DuBois Chemicals, Cincinnati, Ohio	A. H. MOUNT
Dearborn Chemical, Chicago, Illinois	R. A. CARR
Vestal Laboratories, St. Louis, Missouri	F. J. POLLNOW, JR.
Veratex, Detroit, Michigan	S. H. COWEN



A. H. MOUNT

EDWARD L. HUTTON



DuBois chemical cleaning compounds

The Group includes four operating divisions producing and distributing specialty products with related technologies and marketing practices. Each division has a technically trained staff which provides continuing personalized service to institutional, industrial and professional customers.

The DuBois Chemicals Division supplies a wide range of more than 200 specialized chemical cleaning compounds, including sanitizers, paint strippers, phosphatizers and floor cleaners. It serves institutional customers, such as restaurants, hotels, hospitals and schools, and industrial customers in the food, beverage, dairy, transportation, paper and petrochemical fields. The sales force, which was substantially increased in 1965, serves customers throughout the United States and in Canada. DuBois products also are sold in England, France, Germany and Mexico.

The Dearborn Chemical Division manufactures and markets chemicals for the treatment of water used in boilers and cooling systems. Other products include chemicals and coatings designed to prevent metal corrosion.

Vestal Laboratories, a leading supplier of surgical detergents, germicides and floor care products to health industries, institutions and commercial industry, has also increased its marketing activity in the agricultural field. Vestal has developed a highly concentrated germicidal detergent with a dispenser-package.

The Veratex Division fabricates and markets nationally a variety of disposable medical supplies for physicians and dentists.



L. RUSSELL COOK THOMAS E. HANIGAN, JR. C. W. MILLER

This Group is responsible for the operation and development of the Company's food business in the United States, Europe and the Far East.

Ambrosia Chocolate of Milwaukee, Wisconsin and Hooton Chocolate of Newark, New Jersey, which manufacture, process and market chocolate intermediary products for use in the candy, bakery, dairy and ice cream industries, form part of the Chocolate and Confectionery Division. Products include chocolate liquor, cocoa butter and cocoa powder, coatings and cookie drops.

Subsidiaries in the Netherlands are Royal Factories C. J. Van Houten & Zoon N.V., N.V. Cacaofabriek de Zaan, and N.V. Drankenindustrie Raak. Van Houten, with plants in Holland, Belgium, France, Germany and Singapore, manufactures and distributes chocolate bars, tablets, and other confectionery products as well as intermediates such as cocoa powder and cocoa butter. Sales offices are located in many areas of the world, including the United States. De Zaan is a processor of cocoa butter and cocoa powder with international distribution. Raak produces and distributes soft drinks and snack products in Holland.

Urney Chocolates Limited in Ireland is a producer of chocolate and confectionery products and intermediates for markets in Ireland, the United Kingdom, and Canada.

The Consumer Products Group also supervises Grace Brothers Limited in London, and Hughes Brothers Limited, a leading ice cream and dairy company in Ireland.

GRACE PETROLEUM CORPORATION

Executive Vice Presidents —
E. E. McNEIL • R. S. PLUMMER, JR.

Oil production from the Raguba Field in Libya, in which Grace has a 24.5% working interest, averaged more than 95,000 barrels a day during 1965 compared with 73,000 the previous year. At year end there were 37 productive wells in the field. Exploratory drilling continued in other areas of the three concessions in which the Corporation has an interest with subsidiaries of Standard Oil Company (New Jersey) and Sinclair Oil Corporation. These concessions comprise more than 2,200,000 acres within the Sirte Basin of Libya. In addition, the Corporation has an interest in two other concessions in Libya.

CONSUMER PRODUCTS GROUP

Group Executive — THOMAS E. HANIGAN, JR.

Vice Presidents — J. P. BOYER • P. ERIKSEN
W. H. HELLER • C. W. MILLER • W. N. SMIT

Operating Unit Executives —

Ireland W. L. FREEMAN
United Kingdom... F. G. BEAVIS • W. I. ABEL SMITH

Chocolate and Confectionery Division

President — L. RUSSELL COOK

Operating Unit Executives —

Ireland T. A. HEADON
Netherlands J. van DELFT • D. M. BUS
U.S.A. J. J. TELLIER • L. FISCUS



Van Houten products are marketed world-wide.

LATIN AMERICAN GROUP

Group Executive — JOHN C. DUNCAN

Deputy Group Executive — PHILIP C. WALSH

Vice Presidents — L. A. ALDEN • H. BECKER-FLUEGEL • N. CARIGNAN •
J. P. FREEBORN • K. M. GUNKEL • J. T. HALOM • W. G. LEONARD •
G. MAYURNIK • R. V. ROWE • J. R. SIMPSON

Division Managers —

Argentina	ARTHUR WEIBEL	Colombia	JAIME CORDOBA
Bolivia	ALBERT MEISTER	Ecuador	JAMES RAAF
Brazil	LESLIE IDE	Mexico	JORGE LÓPEZ
Central America	DIRK BREEUWER	Peru	GALO MORALES
Chile	JORGE RABY	Venezuela	E. PINILLA POCATERRA
Ore and Mining	H. BECKER-FLUEGEL		



JOHN C. DUNCAN PHILIP C. WALSH



GALO MORALES



ALBERT MEISTER



LESLIE IDE



JORGE RABY

Recent years have seen a significant change in the mix of the Company's investments managed by the Latin American Group.

It has long been the Company's belief that Latin America's most essential problem, the reduction of poverty and the raising of the standard of living, can be attacked most effectively through improved agricultural methods and a sound program of industrialization based on a vigorous private sector. In many cases this has required the importation of technological and marketing skills and capital not available locally. The growth of W. R. Grace & Co.'s investments in Latin America during the past decade has been predicated on providing such skills, and today more than 70% of the business is in three modern industries — chemicals, paper and food processing.

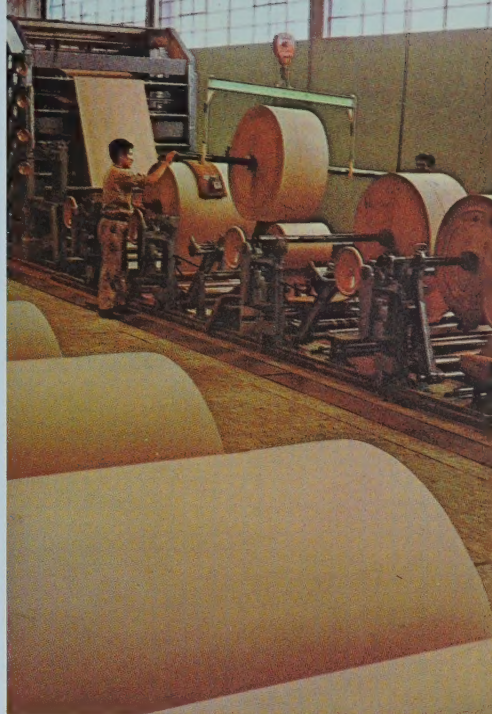
For example, the complex at Paramonga, Peru is a unique industrial development with more than 3,500 employees. Through research, methods were developed to manufacture paper and paperboard from bagasse, the fiber which remains after sugar has been extracted from cane. A total of 70,000 tons of paper a year is produced at Paramonga for a wide variety of end uses, ranging from copy books for school children to multi-wall paper bags and corrugated containers. The paper plant is being expanded to an annual capacity of 100,000 tons per year.

Paper production led to integration into chemicals. The first step was the manufacture, from locally available salt, of chlorine and caustic soda needed for the pulp plant. As production was expanded, local markets were developed for these and such related products as hydrochloric acid, bleaching powder and calcium chloride.

The next step was to combine excess chlorine with ethylene to manufacture vinyl chloride monomer and polyvinyl chloride for Peru's growing plastics industry. The



Vinyl products, Rio de Janeiro, Brazil



Box plant, Lima, Peru



Food production, Valparaiso, Chile

ethylene is produced from alcohol distilled from molasses, a by-product of the sugar industry. The polyvinyl chloride plant, to be completed by mid-year, will be the first of its kind in Latin America.

Paper and chemicals are also important businesses in other Latin American countries. In Colombia a third paper machine has been installed by Productora de Papeles S.A., a company owned jointly with subsidiaries of International Paper Company. This expansion, the second for the five-year-old plant, has been made necessary by the continuing growth of its markets.

In Ecuador a subsidiary manages one of the world's largest box-making operations, in which the Company has a one-third interest. In 1965 it supplied over 60 million boxes used for the shipment of bananas to world markets.

The Company is the largest converter of vinyl products in Latin America. Subsidiaries in Brazil, Mexico, Colombia and Venezuela supply vinyl films and coated fabrics to the automotive, furniture, construction and clothing industries. Phthalic anhydride is manufactured in Colombia and Brazil, and a plant will soon be completed in Chile.

In Mexico, Venezuela, Colombia, Brazil, Chile and Argentina, subsidiaries manufacture and sell a variety of chemical specialty products, many of which stem from the Company's research in the United States. Such products include container sealing compounds, automotive battery separators, CRYOVAC packaging films, resins, formaldehyde, and adhesives for the paint and textile industries.

The rising standard of living in Latin American countries has placed a premium on sophisticated techniques in the marketing and distribution of foodstuffs. Subsidiaries continue to expand their businesses in biscuits, candy and chocolate, hydrogenated shortenings and margarine, and canned fruits and vegetables. Manufacturing facilities are located in Chile, Peru, Colombia, Costa Rica and Guatemala.

Subsidiaries are leading processors of fishmeal in Chile and Peru. This protein-rich substance is sold internationally for use in animal feeds.

The Ore and Mining Division operates a worldwide trading business and several mining properties. Tin and tungsten are mined in Bolivia by International Mining Co., a 51%-owned subsidiary. A new placer tin mine in which the Company has a 75% interest is being developed in that country.

GRACE LINE INC.

President — W. J. McNEIL

Senior Vice Presidents —

A. E. GIBSON · H. R. LOGAN ·
E. R. SENN

Vice Presidents — R. C. ALSOP ·

J. A. HOYT, JR. · D. N. LILLEVAND ·
E. R. LUTZ · A. C. NOVACEK ·
F. P. SANDS · W. St. AMANT ·
A. B. WENZELL

Headquarters —

New York, New York



W. J. McNEIL



S. S. Santa Rosa

Grace Line Inc., an American-flag steamship company, the largest exclusively in inter-American trade, owns and operates a fleet of 25 ships. It offers regular and frequent passenger and freight service between New York, and other United States Atlantic ports, and countries in the Caribbean and on the North and West Coasts of South America. It also provides regular freight service between Canadian and United States Pacific ports, Mexico and the Pacific Coasts of Central and South America.

The fleet consists of two 300-passenger luxury liners — the Santa Rosa and the Santa Paula — four new passenger/cargo liners of the Santa Magdalena class, eight combination cargo/passenger ships and 11 freighters.

Delivery of the first of six new Santa Lucia-class freighters is expected early in 1966 and the remaining five at two- to three-month intervals. These automated freighters will have greater cargo capacity, more refrigerated space, and heavier lift cargo booms, and will be faster and more highly mechanized than the older ships being replaced.

Gulf & South American Steamship Co., Inc., jointly owned with Lykes Bros. Steamship Co., Inc., operates five new cargo liners between United States Gulf of Mexico ports, Panama and the West Coast of South America.

PAN AMERICAN-GRACE AIRWAYS, INC.

President — ANDREW B. SHEA

Headquarters — New York, New York

Panagra, a pioneer in 1928 in commercial airline service to South America, is owned jointly by W. R. Grace & Co. and Pan American World Airways, Inc. The airline's fleet of El Inter Americano DC-8 jets provides transportation for passengers, mail and cargo between New York City, all West Coast countries of South America, and Buenos Aires, Argentina. Through interchange agreements, Panagra uses the routes of Pan American and National Airlines, Inc. north of Balboa, Canal Zone.

Panagra has ordered five of the most modern commercial aircraft now available, the new DC-8 model 62, for delivery in 1967.



ANDREW B. SHEA



INTERNATIONAL OPERATIONS



SALES — OVER \$1 BILLION • PLANTS — 248



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